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SERIAL NUMBER FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO.

08/099,257 07/29/93 HOKEMAN E 47241USA7R

The following is a quotation of the prior art:
26M1/0721

ROBERT H. JORDAN

3M OFFICE OF INTELLECTUAL PROPERTY

COUNSEL, P.O. BOX 33427

ST. PAUL, MN 55133-3427

DATE MAILED: 07/21/94

This is a communication from the examiner in charge of your application.
COMMISSIONER OF PATENTS AND TRADEMARKS

The specification is returned to you with the following action:

☐ This application has been examined. ☒ Responsive to communication filed on 4-25-94. ☐ This action is made final.

A shortened statutory period for response to this action is set to expire 3 month(s), 0 days from the date of this letter.
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

- ☒ Notice of References Cited by Examiner, PTO-892.
- ☐ Notice of Draftsman's Patent Drawing Review, PTO-948.
- ☐ Notice of Art Cited by Applicant, PTO-1449.
- ☐ Notice of Informal Patent Application, PTO-152.
- ☐ Information on How to Effect Drawing Changes, PTO-1474.
- ☐

Part II SUMMARY OF ACTION

- ☒ Claims 1-13 are pending in the application.
Of the above, claims 1-13 are withdrawn from consideration.
- ☐ Claims 1-13 have been cancelled.
- ☐ Claims 1-13 are allowed.
- ☒ Claims 1-13 are rejected.
- ☐ Claims 1-13 are objected to.
- ☐ Claims 1-13 are subject to restriction or election requirement.
- ☐ This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.
- ☐ Formal drawings are required in response to this Office action.
- ☐ The corrected or substitute drawings have been received on _____ Under 37 C.F.R. 1.84 these drawings are ☐ acceptable; ☐ not acceptable (see explanation or Notice of Draftsman's Patent Drawing Review, PTO-948).
- ☐ The proposed additional or substitute sheet(s) of drawings, filed on _____, has (have) been ☐ approved by the examiner; ☐ disapproved by the examiner (see explanation).
- ☐ The proposed drawing correction, filed _____, has been ☐ approved; ☐ disapproved (see explanation).
- ☐ Acknowledgement is made of the claim for priority under 35 U.S.C. 119. The certified copy has ☐ been received ☐ not been received ☐ been filed in parent application, serial no. _____; filed on _____.
- ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.
- ☐ Other

EXAMINER'S ACTION

Art Unit 2617

1. The following is a quotation of the first paragraph of 35 U.S.C. § 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The specification is objected to under 35 U.S.C. § 112, first paragraph, as failing to provide an enabling disclosure.

There is no control circuitry, block diagrams and/or flowcharts provided in the specification and the drawings to explain the following: how the vehicle calculates a time after the vehicle exits from the detection area at which the vehicle will not influence the period of the oscillator signal, measuring the inductance in order to recognize an environmental factor or change unrelated to the inductive sensor, measuring the inductance in order to identify changes not caused by vehicles, and therefore recognize that mechanical difficulties requiring maintenance has occurred, and adjusting reference values to reflect slow changes caused by environmental factors.

Applicant is cautioned about the inclusion of new matter into the specification.

2. Claims 1-13 are rejected under 35 U.S.C. § 112, first paragraph, for the reasons set forth in the objection to the

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specification.

3. Claims 1-10 and 13 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claims 1-2 and 5, the claim language "after vehicle exit from" of a said vehicle" does not make coherent sense. It should read --after the vehicle exits from--.

As to claim 2, "the ratio" lacks antecedent basis.

As to claim 6, line 14, "the values" is indefinite. It should be defined with greater specificity.

As to claim 7, line 8, the phrase "same dummy sensor" is unclear. There appears to be only one dummy sensor (see claim 8). The phrase "environmental factor" is indefinite. It should be defined with greater specificity.

As to claim 8, the phrase "environmental change" is indefinite. It should be defined with greater specificity.

As to claim 9, the preamble does not make coherent sense. It should be revised carefully. On lines 14-16, the phrase "in a predetermined range outside a threshold rate of change" does not make coherent sense.

As to claim 10, "the rate of frequency change" and "the sensor drive oscillator signal" lack antecedent basis.

As to claim 13, the phrase "environmental factors" is indefinite. It should be defined with greater specificity. "The oscillator period" lacks antecedent basis.

Claims 2-4 are rejected as being dependent upon a rejected claim.

4. Claims 1-13 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-17 of U.S. Patent No. 5,278,555. Although the conflicting claims are not identical, they are not patentably distinct from each other because although '555 fails to explicitly claim all the steps of calculating of the claimed invention, which include, the time after the vehicle exits from the detection area "at which the vehicle will not influence the period of the oscillator signal", measuring the inductance in order to recognize an environmental factor or change unrelated to the inductive sensor, measuring the inductance in order to identify changes not caused by vehicles thereby recognizing mechanical difficulties, and adjusting reference values to reflect slow changes caused by environmental factors, all of the above steps are performed and calculated by the same processor 20 as claimed by '555. Although the claimed invention and '555 have various calculations performed by the same processor, both the claimed invention and '555 include the same structural elements,

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which include the sensors and circuits used to provide the necessary information to the processor. Therefore, one of ordinary skill in the art at the time of the invention would have readily recognized that the programming of a processor to perform various functions does not constitute an inventive step but an obvious design choice.

5. The obviousness-type double patenting rejection is a judicially established doctrine based upon public policy and is primarily intended to prevent prolongation of the patent term by prohibiting claims in a second patent not patentably distinct from claims in a first patent. *In re Vogel*, 164 USPQ 619 (CCPA 1970). A timely filed terminal disclaimer in compliance with 37 C.F.R. § 1.321(b) would overcome an actual or provisional rejection on this ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 C.F.R. § 1.78(d).

6. Applicant's arguments with respect to claims 1-13 have been considered but are deemed to be moot in view of the new grounds of rejection.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edward Lefkowitz whose telephone number is (703) 305-4816. The examiner can normally be reached on Monday-Thursday from 8:00AM-5:30PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Peng, can be reached on (703) 305-4392. The fax phone number for this Group is (703) 305-9508.

Any inquiry of a general nature or relating to the status of

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Art Unit 2617

this application should be directed to the Group receptionist
whose telephone number is (703) 305-4750.



Edward Lefkowitz
July 13, 1994



**BRENT SWARTHOUT
PATENT EXAMINER
GROUP 2600**